

Serial No.: 09/587,913
Response to Office Action of 08 September 2003
Docket No.: U 012803-1

REMARKS

This application contains claims 1-31. Claims 1, 7 and 23 are hereby amended. No new matter has been introduced. Reconsideration is respectfully requested.

Claims 7 and 23 were rejected under 35 U.S.C. 112, second paragraph, for referring to "one or more applicable standards defined by the Internet Engineering Task Force (IETF)." Applicant has amended these claims in order to overcome this rejection. The claims now refer to specific Requests for Comments (RFCs) of the IETF, as cited in the specification (page 2, line 26, through page 3, line 2). Applicant respectfully submits that the IETF itself is very well known in the art, and that the RFCs now cited by number in amended claims 7 and 23 have a clear and unequivocal meaning. Therefore, the amended claims are believed to comply with the requirements of 35 U.S.C. 112.

Claims 1-5, 8-12, 15-18, 20, 21, 24-28, 30 and 31 were rejected under 35 U.S.C. 102(b) over Schwaller et al. (U.S. Patent 5,881,237). Claim 1 has been amended to correct a typographical error. Applicant respectfully traverses this rejection.

Claim 1 recites a method for testing a communication network that comprises specifying a packet filtering criterion, and transmitting data packets meeting the criterion between end-points of the network. At least one of these packets is intercepted by a network agent at a location in the network traversed by the packet. Information regarding the intercepted packet is recorded at the location of the network agent, and is processed in order to analyze a route of the

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intercepted packet through the network.

Schwaller describes methods and systems for network performance testing, based on execution of test protocols by endpoint nodes (abstract). All the protocols and scenarios described by Schwaller relate to end-to-end network behavior, with measurements made only at the endpoints nodes, where packets either originate or terminate. Schwaller makes no mention of intercepting packets at locations traversed by the packets, which must by implication be locations along network routes between the endpoints. As noted in the specification (page 6, lines 24-27), the inability to intercept packets along their routes is a shortcoming of network diagnostic systems known in the art, which are thus limited to determining end-to-end information regarding packet transmission.

Turning now to the associations made by the Examiner between the elements of claim 1 and specific passages in Schwaller, the step of "specifying at least one packet filtering criterion" is identified with col. 8, lines 1-15, in Schwaller. This passage refers to a test scenario example, which specifies a number of test protocol scripts to be carried out between certain endpoint pairs. Thus, it appears that the Examiner identifies Schwaller's script as a packet filtering criterion. The "script," according to Schwaller (col. 8, lines 20-21), identifies the network protocol to use between the endpoints and the type of application to emulate.

The Examiner goes on to associate the step of "intercepting at least one of the data packets" with col. 36, lines 62-67, in Schwaller. This passage reads as follows: "At Block 120, endpoint 1 nodes 14, 15 determine if a stop command

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has been received from console node 20. A stop command may be generated by console node 20 if the test scenario specifies running until any script completes and another endpoint pair 22, 24 has completed its test protocol script." Schwaller goes on to state (col. 37, lines 2-4): "If a stop has been received at Block 120, endpoint 1 nodes 14, 15 stop execution of their test protocols." In other words, when the stop command is received, the endpoint nodes terminate transmission of data packets in accordance with the test protocol script. No packet interception takes place here or anywhere else in Schwaller. On the contrary, if packet transmission is terminated at the originating node (endpoint 1), there are no more packets that could even be intercepted.

It appears, perhaps, that the Examiner has read the term "intercepting" broadly to include the meaning of not transmitting packets at all. Applicant respectfully submits that this meaning is far outside the ordinary scope of the term. For example, *Webster's Unabridged Dictionary* (1992) defines "intercept" as "1. to take, seize, or halt (someone or something on the way from one place to another) ..." This is clearly the meaning implied by the context of claim 1. An alternative definition, marked as *obsolete*, is "to prevent or cut off the operation or effect of." The claims and specification of the present patent application give no support, however, to this sort of variant reading.

The term "intercepting" must therefore be given its ordinary meaning in interpreting the claims. As stated in MPEP 2111.01: "The words of a claim must be given their 'plain meaning' unless they are defined in the specification.. 'Plain meaning' refers to the meaning given to the term by those of ordinary skill in the art." Terminating transmission of

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packets at the source is not within the plain meaning of "intercepting" packets. The specification of the present patent application clearly uses "intercepting" in accordance with its plain meaning and provides no support for any other interpretation of this term. Schwaller, on the other hand, teaches only terminating transmission of packets, and makes no suggestion of intercepting packets according to the plain meaning of this term.

Furthermore, the language of claim 1 itself makes clear that packet interception takes place not at the source (Schwaller's endpoint 1), but rather "at one or more of the respective locations in the network traversed by the at least one of the data packets." The term "traverse" is defined in Webster's as "1. to pass or move over, along or through." The present patent application clearly uses the term "traverse" in its conventional sense, as well. In the embodiment shown in Fig. 1, for example, the network agents (NA) that are used for packet interception are clearly located at nodes in the network that are traversed by packets transmitted between the traffic agents (TA) that serve as end-points. Interpreting "intercept" to include stopping transmission of data packets at their source, as the Examiner appears to have done, is inconsistent with the clear meaning of the method step of claim 1 in which both of the terms "intercepting" and "traversed" occur.

Thus, Applicant respectfully submits that Schwaller cannot reasonably be taken to teach or suggest the key step of "intercepting at least one of the data packets meeting the [filtering] criterion using the network agents at one or more of the respective locations in the network traversed by that at least one of the data packets." It is no coincidence that

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Schwaller makes no mention of the actual terms "intercept" or "filter," because these concepts are foreign to the end-to-end network testing conception described by Schwaller. Claim 1 is therefore believed to be patentable over the cited art.

Claims 2-5, 8-12 and 15 depend from claim 1. In view of the patentability of claim 1, Applicant respectfully submits that these claims are patentable, as well. Furthermore, Applicant believes that the dependent claims recite independently patentable subject matter. In the interest of brevity, however, specific arguments regarding the patentable features of the dependent claims are omitted here.

Claim 16 recites apparatus for testing a communication network, comprising network agents, which operate in a manner similar to the method recited in claim 1. The rejection of claim 16 is similarly based on associating interception of data packets by the network agents with Schwaller's description (col. 36, lines 62-67) of termination of packet transmission. As argued above in reference to claim 1, this association is not supported either by the plain meaning of the words of the claims or by the specification. Claim 16 is therefore believed to be patentable over the cited art. In view of the patentability of claim 16, claims 17, 18, 20, 21, 24-28 and 30, which depend from claim 16, are believed to be patentable, as well.

Claim 31 recites a computer software product, which causes a computer to specify a packet filtering criterion, such that at least one of the data packets meeting the criterion is intercepted using a network agent. Again, the grounds of rejection of claim 31 are similar to those of claim 1. Applicant therefore believes that claim 31 is patentable

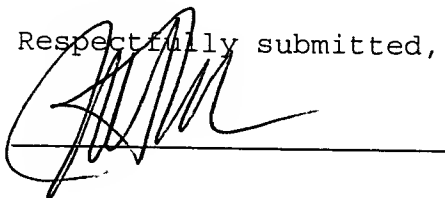
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over the cited art for the reasons argued above.

Claims 6, 13, 14, 19, 22 and 29 were rejected under 35 U.S.C. 103(a) over Schwaller in view of McKee et al. (U.S. Patent 5,477,531), while claims 7 and 23 were rejected under 35 U.S.C. 103(a) over Schwaller in view of Iddon et al. (U.S. Patent 5,634,009). Applicant respectfully traverses this rejection. In view of the patentability of independent claims 1 and 16, as argued above, claims 6, 7, 13, 14, 19, 22, 23 and 29, which depend from these independent claims, are believed to be patentable, as well. Although Applicant believes that these dependent claims, too, recite patentable subject matter, specific arguments as to their patentability are omitted here for the sake of brevity.

Applicant believes the amendments and remarks presented hereinabove to be fully responsive to all of the grounds of rejection raised by the Examiner. In view of these amendments and remarks, applicant respectfully submits that all of the claims in the present application are in order for allowance. Notice to this effect is hereby requested.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'J. Cohen', is written over a horizontal line.

JULIAN H. COHEN
LADAS & PARRY
26 WEST 61ST STREET
NEW YORK, NEW YORK 10023
REG.NO.20302(212)708-1887